

Title (en)

Circuit for computing membership functions values in a fuzzy logic controller.

Title (de)

Schaltung zum Berechnen von Mirgliedsfunktionswerten in einem Fuzzylogik-Steuerwerk.

Title (fr)

Circuit à calculer les valeurs des fonctions d'appartenance dans un controlleur à logic floue.

Publication

EP 0675430 A1 19951004 (EN)

Application

EP 94830157 A 19940331

Priority

EP 94830157 A 19940331

Abstract (en)

Circuit for calculation of values of membership functions (FA) in a controller (1) operating with fuzzy logic procedures and said membership functions (FA) being of triangular or trapezoid form and defined in a so-called discourse universe (U) discretized in a finite number of points (m) and said controller (1) comprising a central control unit (3) equipped with a memory section (5) for memorization of said membership functions (FA) and connected to a microprocessor (9) in turn connected to an interface (13) and in which the membership functions (FA) are memorized by means of a codification (FAi) of the coordinate of the vertex and the slopes at the sides of the vertex. The circuit comprises a calculator (11) connected to the memory section (5), to the microprocessor (9), and to the interface (13), to reconstruct the value (α) of each membership functions (FA) at each point of the discourse universe (U). <IMAGE>

IPC 1-7

G06F 7/60

IPC 8 full level

G05B 13/02 (2006.01); **G06F 9/44** (2006.01); **G06N 7/02** (2006.01); **G06N 7/04** (2006.01)

CPC (source: EP US)

G06N 7/04 (2013.01 - EP US); **Y10S 706/90** (2013.01 - US)

Citation (search report)

- [X] DE 3936503 A1 19900510 - OLYMPUS OPTICAL CO [JP]
- [A] EP 0574714 A2 19931222 - MOTOROLA INC [US]
- [A] US 5179629 A 19930112 - NAKAMURA KAZUO [JP]

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0675430 A1 19951004; JP H07271592 A 19951020; US 5615303 A 19970325

DOCDB simple family (application)

EP 94830157 A 19940331; JP 5921495 A 19950317; US 40805895 A 19950321